

AMENDMENT UNDER 37 C.F.R. § 1.116
U.S. Application No. 09/386,000
Attorney Docket No. Q55595

REMARKS

I. Introduction

Claims 1-6, 13, and 15-18 have been examined. Claims 1, 5, and 6 stand rejected under 35 U.S.C. § 102(e), as allegedly being anticipated by Yamada et al., U.S. Patent No. 5,838,354 (hereinafter "Yamada"). Additionally, claims 13 and 17 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over McCulley, U.S. Patent No. 938,885 (hereinafter "McCulley"), in view of Smedal, U.S. Patent No. 1,128,730 (hereinafter "Smedal"). Claim 15 stands rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Hageman, U.S. Patent No. 2,300,276 (hereinafter "Hageman"), in view of Metzner, U.S. Patent No. 2,904,332 (hereinafter "Metzner").

Claims 16 and 18 are allowed. Additionally, claims 2-4 are objected to as being dependent upon a rejected base claim (*i.e.*, claim 1), but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Applicant overcomes the rejections of claims 1-6, 13, 15, and 17, as well as the objection to claims 2-4, as follows.

II. Allowable Subject Matter

Claims 16 and 18 are allowed. Additionally, the Examiner acknowledges that claims 2-4 contain allowable subject matter, but are objected to as being dependent upon a rejected base claim (*i.e.*, claim 1). The Examiner indicates that claims 2-4 would be allowable if rewritten in independent form including all of the limitations of the base claim (claim 1). Applicant

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withholds rewriting claims 2-4 in independent form at this time, pending consideration by the Examiner of amended claim 1, as discussed below.

III. Claim Rejections -- 35 U.S.C. § 102(e)

Claims 1, 5, and 6 stand rejected under § 102(e), as allegedly being anticipated by Yamada.

A. Claim 1

In Applicant's Response filed on November 13, 2002, Applicant noted that Yamada fails to disclose a "paper feeding unit including . . . at least one sheet of paper including a stiff carton", as recited in claim 1. The Examiner responds by stating that the "material worked upon does not limit apparatus claims" (Office Action, page 5 *citing* MPEP § 2115).

Applicant respectfully submits that the recitation of "at least one sheet of paper including a stiff carton" in claim 1 does more than simply describe the material worked upon. Claim 1 also recites that "the paper feeding unit is located at a height that enables a user standing in front of the printer to execute the paper feeding process including . . . setting the sheet of paper". Thus, to the extent that Yamada fails to disclose or suggest using a sheet of paper including a stiff carton, Yamada must also fail to disclose or suggest that a user can set the sheet of paper while standing in front of the printer.

Furthermore, it is the Examiner's position that Fig. 1 of Yamada discloses "the paper feed unit being located at a height that enables a user standing in front of the printer to execute the paper feeding process", as recited in claim 1. Applicant respectfully disagrees. The mere

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placement of the paper feed station 1 of Yamada above the recording station 2 of Yamada does not, in and of itself, disclose or suggest the aforementioned height requirement of claim 1.

Additionally, Applicant amends claim 1 to recite "a paper feeding unit operable to feed at least one roll of paper and at least one sheet of paper including a stiff carton". Conversely, Yamada describes a paper feeding unit operable to feed only rolled paper. *See, e.g.*, Abstract of Yamada. Thus, because Yamada fails to disclose or suggest each and every feature of claim 1, Yamada does not anticipate claim 1.

B. Claims 5 and 6

Claims 5 and 6 are not anticipated by Yamada at least by virtue of their dependency.

IV. Claim Rejections -- 35 U.S.C. § 103(a)

A. Claims 13 and 17

Claims 13 and 17 stand rejected under § 103(a) as allegedly being unpatentable over McCulley in view of Smedal.

In Applicant's Response filed on November 13, 2002, Applicant noted that Smedal fails to teach or suggest "a sheet feeding area positioned at a height where a user, who is approximately 170 cm tall, can set up a printing medium without having to bend substantially at the waist when the user is standing erect in front of the printer and standing substantially at ground level", as recited in claim 13. Furthermore, Applicant noted that the attachment of Smedal relied on by the Examiner for describing the sheet feeding area of a large printer is

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actually a device separate/distinct from the typewriter. *See, e.g.*, page 2, lines 55-58 of Smedal. Thus, the attachment of Smedal fails to correspond to the sheet feeding area of a large printer.

Furthermore, Applicant noted that McCulley and Smedal represent non-analogous art in that they both relate to typewriters, which are not large printers, as recited in claims 13 and 17. Typewriters do not generally suffer from the problems encountered by large printers. For example, typewriters would not require a deeper installation space for replacing a paper roll or require that a user replace a heavy roll of paper. *See, e.g.*, Applicant's page 1, line 1 to page 2, line 19. Therefore, to the extent that McCulley and/or Smedal represent non-analogous art, the rejection of claims 13 and 17 under § 103(a) is improper.

Additionally, based on the above rationale, the Examiner has failed to provide a reasonable motivation for combining the teachings of McCulley and Smedal in rejecting claims 13 and 17. The Examiner alleges that "it would have been obvious to a person of ordinary skill in the art at the time of the applicant's invention to modify McCulley by utilizing a frame with a vertical leg adapted to be supported at any elevation, including a height at which a user, who is approximately 170 cm tall, can set up a printing medium without having to bend substantially at the waist when the user is standing erect in front of the printer and standing substantially at ground level, when the printer is placed substantially at ground level, for the purpose of adapting the attachment to any type [of] writing machine".

However, as the Federal Circuit recently reminded us, the USPTO is held to a *rigorous* standard when trying to show that an invention would have been obvious in view of the combination of two or more references. *See, In re Sang Su Lee*, 2002 U.S. App. LEXIS 855, *10

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(Fed. Cir. 2002), *citing, e.g., In re Dembiczak*, 175 F.3d 994, 999, 50 USPQ2d 1614, 1617 (Fed. Cir. 1999) (“Our case law makes clear that the best defense against the subtle but powerful attraction of a hindsight-based obviousness analysis is rigorous application of the requirement for a showing of the teaching or motivation to combine prior art references.”). The Federal Circuit goes on to emphasize that the “need for specificity pervades this authority.” *In re Sang Su Lee* at *10-*11 (emphasis added) (*citing In re Kotzab*, 217 F.3d 1365, 1371, 55 USPQ2d 1313, 1317 (Fed. Cir. 2000) (“particular findings must be made as to the reason the skilled artisan, with no knowledge of the claimed invention, would have selected these components for combination in the manner claimed”)). The current grounds of rejection does not satisfy this standard for demonstrating that the claimed invention would have been obvious in view of the combination of McCulley and Smedal.

Specifically, Smedal describes attachments for typewriters. *See, e.g.,* claims 1-12 of Smedal. The Examiner has failed to explain why one of ordinary skill in that art would have been motivated to modify the post 2 such that it is sufficiently long to extend the roll of paper 27 to a height sufficient to allow a user to set up the printing medium without having to bend substantially at the waist while standing erect in front of the typewriter. Indeed, absent impermissible hindsight on the part of the Examiner, there does not appear to be any suggestion or motivation in the references for modifying Smedal in this manner. Furthermore, such a modification would not even appear to work in the context of a large printer. As discussed above, the rolls of paper for a large printer are often very heavy, such that the structure described in Smedal would not appear adequate for supporting such a heavy roll of paper. Additionally,

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because Smedal describes an attachment for typewriters, it teaches away from the requirement of claim 13 that "the sheet feeding area is positioned at the height when the printer is placed substantially at the ground level". Typewriters, by their very nature, are designed to not be placed substantially at the ground level.

The Examiner responds by alleging that Smedal discloses that "the printing medium can be set at any vertical height so long as it is supported by post 2" (Office Action, page 5).

Applicant respectfully disagrees with the Examiner's position. Smedal fails to teach or suggest that the post 2 is of a size sufficient to allow the attachment to be positioned at a height whereat a user can set up a printing medium without having to bend substantially at the waist when the user is standing erect in front of the printer and standing substantially at ground level. Indeed, given the nature of typewriters, it is not clear why a user would be standing to set up the printing medium. Unlike for large printers (*see, e.g.*, claim 13), the printing medium for typewriters is usually not bulky or heavy.

Furthermore, the Examiner states that a typewriter is a printer, and concludes that the claims "do not contain any language limiting the overall dimensions of the apparatus" (Office Action, page 5). The claims expressly recite a **large** printer, and when read in light of the specification, clearly aren't directed at typewriters.

Additionally, Applicant amends claim 13 to recite a "sheet feeding area being operable to feed a printing medium having a width in a range from 210 mm to 1120 mm". *See, e.g.*, Applicant's Specification at page 9, lines 16-25. Neither McCulley nor Smedal teach or suggest

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a sheet feeding area operable to feed a printing medium having a width in a range from 210 mm to 1120 mm.

Thus, for at least the above exemplary reasons, a reasonable combination of McCulley and Smedal, if any, would not render the embodiment of claim 13 obvious. Claim 17 is patentable over McCulley and Smedal as well, at least by virtue of its dependency.

B. Claim 15

Claim 15 stands rejected under § 103(a) as allegedly being unpatentable over Hageman in view of Metzner, and the Examiner relies on Metzner as allegedly making up for the acknowledged deficiencies of Hageman (Office Action, page 4).

In Applicant's Response filed on November 13, 2002, Applicant noted that Hageman fails to teach or suggest "a cover member, which covers a first feeding path for the roll of paper from above", as recited in claim 15. The Examiner responds by alleging that the strip guiding plates 42 and the housings/spools 45 of Hageman disclose the recited cover member, "which covers a first feeding path for the roll of paper from above" (Office Action, page 6).

Applicant respectfully disagrees. Hageman describes a housing/spool 45 surrounding a carbon supply roll 46 (the record strips S are not so surrounded), and a separate guide plate 42. *See, e.g.*, Fig. 4 of Hageman. However, neither housing 45 nor guide plate 42, either alone or in combination, "covers a first feeding path for the roll of paper from above". Indeed, both a record strip S and a carbon strip C follow a feeding path (above support rail 48) which is uncovered. *See, e.g.*, Fig. 4 of Hageman.

Furthermore, the Examiner acknowledges that Hageman fails to teach or suggest that "the cover member extends linearly from a upstream portion thereof to a downstream portion thereof

in connection with a direction in which the sheet of paper is fed" or that "the cover member is disposed between the sheet of paper and the roll of paper at a location in the sheet feeding area at which the roll of paper is in a rolled shape", as recited in claim 15 (Office Action, page 4). The Examiner alleges that Metzner makes up for these deficiencies of Hageman.

The Examiner alleges that Metzner describes a cover member 23 that extends linearly from an upstream portion to a downstream portion in which a sheet of paper is fed and that the cover member is disposed between a sheet of paper and a feed pack at a location in the feed pack area for the purpose of continuously supporting the paper from the pack to the printing area. Metzner describes separating a record strip material 14 into its component parts, each of which is directed into a separate chute defined by downwardly and rearwardly inclining deflector guides 22 and 23. *See, e.g.*, Fig. 1 of Metzner. Metzner fails to make up for the deficiencies of Hageman for at least the following illustrative reasons.

First, Metzner fails to teach or suggest that "the cover member extends linearly from a upstream portion thereof to a downstream portion thereof in connection with a direction in which the sheet of paper is fed", as recited in claim 15. Metzner fails to teach or suggest a cover member. The deflector guides 23 relied on by the Examiner are for guiding the component parts of the record strip material 14 (after recording) into the appropriate chutes. *See, e.g.*, Fig. 1 of Metzner. Furthermore, Metzner describes feeding a pack of series connected record forms 13 (supported by a shelf 12) into a recording machine 11. *See, e.g.*, Fig. 1 of Metzner. However, the deflector guides 22 and 23 extend from an upstream portion to a downstream portion in a direction opposite to the direction in which the sheet of paper is fed. *See, e.g.*, Fig. 1 of Metzner.

Second, Metzner fails to teach or suggest that "the cover member is disposed between the sheet of paper and the roll of paper at a location in the sheet feeding area at which the roll of paper is in a rolled shape" (emphasis added). The Examiner alleges that Metzner discloses a cover member that is disposed between a sheet of paper and a feed pack at a location in the feed pack area for the purpose of continuously supporting the paper from the pack to the printing area (Office Action, page 4). Even assuming *arguendo* that the Examiner's assertion is correct, Metzner still fails to teach or suggest the claimed invention. Metzner describes a pack of series connected record forms 13 and not a roll of paper. Indeed, the use of these series connected forms appears to facilitate the collection of used record strip elements R on depressed portions 24 against uprights 25, whereas previously rolled paper would be difficult to collect in this manner. *See, e.g.*, Fig. 1 of Metzner.

In response to the Examiner's allegation that "Metzner discloses a cover member (23) that is above [the] sheets" (Office Action, page 6), Applicant notes that the purpose of the deflector guides 23 of Metzner is to separate the record strip material 14 into its component parts (elements R and C). *See, e.g.*, col. 2, lines 38-72 of Metzner. Therefore, the deflector guides 23 do not cover the sheets as alleged by the Examiner, but instead, run somewhat parallel to a collection path of the record strip elements R, while carrying the carbon strip elements C. *See, e.g.*, Fig. 1 of Metzner.

Additionally, Applicant amends claim 15 to recite "a sheet feeding area operable to feed at least one roll of paper and at least one sheet of paper toward a printing unit at which printing is performed thereon" and "wherein the cover member extends linearly from an upstream portion

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thereof to a downstream portion thereof in connection with a direction in which the sheet of paper is fed at the sheet feeding area". Hageman and Metzner, alone or in combination, fail to teach or suggest these features of claim 15.

For example and not by way of limitation, Metzner fails to teach or suggest that "the cover member extends linearly from an upstream portion thereof to a downstream portion thereof in connection with a direction in which the sheet of paper is fed at the sheet feeding area", as recited in claim 15. In Metzner, the deflector guides 22 and 23 are guide members for discharging used record strip elements R and carbon strip elements C from the printing unit, *i.e.*, away from the recording machine 11.

Thus, for at least the above exemplary reasons, a reasonable combination of Hageman and Metzner, if any, would not render the embodiment of claim 15 obvious.

V. New Claims 25-30

Applicant adds new claims 25-30 to obtain more varied protection for the invention.

VI. Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned attorney at the telephone number listed below.

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The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



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PATENT TRADEMARK OFFICE

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APPENDIX
VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE CLAIMS:

The claims are amended as follows:

1. (Twice Amended) A large printer comprising:

a paper feeding unit ~~including~~ operable to feed at least one roll of paper and at least one sheet of paper including a stiff carton ~~loaded to said paper feeding unit~~, the paper feeding unit being located at a height that enables a user standing in front of the printer to execute the paper feeding process including replacement of the roll paper and setting the sheet of paper;

a printing unit located below the paper feeding unit,

a discharged paper stacking unit located below the printing unit; and

a paper feeding path extending in a substantially straight line from the paper feeding unit to the discharged paper stacking unit via the printing unit.

13. (Five times amended) A large printer comprising:

a sheet feeding area positioned at a height at which a user, who is approximately 170 cm tall, can set up a printing medium without having to bend substantially at the waist when the user is standing erect in front of the printer and standing substantially at ground level, the sheet feeding area being operable to feed a printing medium having a width in a range from 210 mm to 1120 mm;

wherein the sheet feeding area is positioned at the height when the printer is placed substantially at the ground level, and

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wherein a plurality of paper rolls are loaded in the sheet feeding area so as to be arranged obliquely relative to each other in the vertical direction.

15. (Five times amended) A large printer comprising:

a sheet feeding area ~~including~~ operable to feed at least one roll of paper and at least one sheet of paper toward a printing unit at which printing is performed thereon; and

a cover member, which covers a first feeding path for the roll of paper from above, and which supports the sheet of paper from below to constitute a part of a second feeding path for the sheet of paper,

wherein the cover member extends linearly from an upstream portion thereof to a downstream portion thereof in connection with a direction in which the sheet of paper is fed at the sheet feeding area, and

wherein the cover member is disposed between the sheet of paper and the roll of paper at a location in the sheet feeding area at which the roll of paper is in a rolled shape.

Claims 25-30 are added as new claims.